PATENT
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: William J. COLUCCI, et al.	)	
Application No.: 10/670,552	)	Group Art Unit: 1714
Filed: September 25, 2003	)	
	)	Examiner: Cephia D. Toomer
For: Fuels Compositions and Methods for Using Same	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Supplemental Declaration by William J. Colucci

Dear Sir:

I, William J. Colucci, declare and say:

1. I submit this supplemental Declaration further to my Declaration of May 8, 2007. I submit this Declaration in support of patentability of the present application.

2. I have studied the Office Action of April 21, 2008 in this case and the amended claims previously presented. Similarly, I have restudied the present application.

3. It is conventional wisdom that increasing the treat rate of a fuel additive effective at improving a combustion characteristic will typically further increase the

effectiveness of the additive in the fuel composition. Succinimides are known to control engine deposits in conventional internal combustion engines. By our novel testing, we determined that increasing the treat rate of a succinimide additive alone in a DIG engine reduced flow loss in a DIG engine. Knowing then that a succinimide reduced flow rate loss, the subject application proceeds contrary to conventional wisdom by actually reducing the amount of the succinimide in the fuel composition for significantly improved and surprising results.

4. In the Office Action, the Examiner states that the specification data, as also contained in my earlier Declaration, is not commensurate with the scope of the claims. By the exemplified data of my test results, I have ascertained the trend that increasing a succinimide additive will reduce flow loss in a DIG engine. Surprisingly, and counter-intuitively, I have also found that providing a trace amount of a succinimide with a Mannich is highly effective at reducing flow loss. I have extrapolated from these results and concluded from the exemplified test data that a trace succinimide would be highly effective with a Mannich detergent at reducing injector fouling and/or flow loss in a DIG engine.

5. The Office Action alleges that the subject invention was determined by routine experimentation. However, we are not aware of any prior testing or information that indicates the present combination of additives were effective in DIG engines at all.

6. Even if there was evidence or a suggestion to use the subject additives in a DIG engine, the currently claimed ratio of Mannich detergent to succinimide is critical to the operation of the claimed method. The significantly improved results were surprisingly found in the claimed ratio range. Operating outside of the claimed range

does not provide the desired benefit. The claimed trace amount of succinimide to Mannich detergent is a critical balance that was previously not identified or recognized.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: Aug 9, 2008

William J. Colucci